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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,950	10/10/2001	Syuji Tsukamoto	107292-00027	4804
25944	7590	07/26/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			PATEL, GAUTAM	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/972,950	TSUKAMOTO, SYUJI <i>cp</i>
	Examiner	Art Unit
	Gautam R. Patel	2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 May 2004.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
 4a) Of the above claim(s) 5,6,8,9 and 13-16 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-4,7 and 10-13 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

1. Claims 1-16 are pending for the examination.

Election/Restriction

2. Claims 5-6, 8-9 and 13-16 are withdrawn from further consideration by the examiner, 37 C.F.R. § 1.142(b) as being drawn to figs. 7-9 for second and third embodiments. Election was made with traverse of claims 1-4, 7, 10-12 and 16.

Applicant's election with traverse of group "a" in Paper No. 9 is acknowledged. The traversal is on the ground(s) that "the subject matter of all species is sufficiently related that a thorough search for the subject matter of any species would encompass a search for the subject matter of the remaining species. ...search and examination of the entire application could be made without serious burden."

This is not found persuasive because, first, the Examiner does not need to show how much burden is sufficient and how much is not for election of the species requirement. Second, the argument regarding species being sufficiently related is not found persuasive because these species are not obvious [unless the Applicants claiming that they obvious] from each other. Also without first doing search it is practically impossible to tell if search for one species will produce data for another or not. See 803.00 and 808.01(a); M.P.E.P.

The requirement is still deemed proper and is therefore made **FINAL**.

NOTE: It seems typographical error was made in electing claim 16. since claim 14 was NOT elected as containing the subject matter from another non-elected species, claim 16 [which depends on non-elected claim 14] is also no-elected by definition and is therefore removed from the examination.

The Applicants are urged to cancel all non-elected claims.

After above correction claims 1-4, 7 and 10-12 are pending for examination.

Specification

3. The disclosure is objected for following reasons.
 - a. The title of the invention is neither precise nor descriptive. A new title is required which should include, using twenty words or fewer, claimed features that differentiate the invention from the Prior Art. It is recommended that the title should reflect the gist of or the improvement of the present invention.
 - b. Specification needs to be updated with respect to information on the related applications. Cross-References to Related Applications: See 37 C.F.R. § 1.78 and section 201.11 of the M.P.E.P.
 - c. This application does not contain an Abstract of the Disclosure as required by 37 C.F.R. § 1.72(b). An Abstract on a separate sheet is required.

Applicant is reminded of the *proper language* and **format** of an Abstract of the Disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the **range of 50 to 150 words**. It is important that the **abstract not exceed 150 words in length** since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said", should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In the present Application, the abstract is too long.

Corrections are required.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,611,484. Although the conflicting claims are not identical, they are not patentably distinct from each other because one of ordinary skill in the art would have realized that specifying stages to five instead of plural stages does not change the invention especially in light of the fact that Arioka does discloses these five or more stages. Similarly claim 10 is rejected over claim 13 of the same patent, with similar arguments as above

As to claims 2-4, 7 and 11-12, since they are also fully disclosed in the patent number 5,931,904; they are therefore considered rejected as non-statutory double patenting as set forth in the paragraphs here in above.

Claim Rejections - 35 U.S.C. § 112

5. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-4 and 7 are rejected under 35 U.S.C. § 112, **first paragraph**, as containing subject matter which was not described in the specification in such a way as

to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Page 12, simply states that "recording cells are being continuously formed". The specification does not disclose at all that "the recording layers are being continuously formed at all. Especially there no disclosure about manufacturing of the disk at all, hence no layers can be formed.

6. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 and 7 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 5-6 are confusing and unclear. It is not clear how recording layers are being formed and how they relate to laser beam.

Claim Rejections - 35 U.S.C. § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 10-12 are rejected under 35 U.S.C. § 102(e) as being anticipated by Arioka et al., JPO 2000-312879 (hereafter Arioka).

As to claim 10, Arioka discloses the invention as claimed [see Figs. 1 and 3] including continuously forming plural virtual recording cells, setting five stages, and forming recording marks, comprising the steps of:

continuously forming plural virtual recording cells, each of which has an arbitrary unit length and a unit width perpendicular to the unit length in a relative moving direction to the laser beam, in the relative moving direction, with respect to the recording layer;

setting five stages or more irradiation times with respect to the virtual recording cell so that the irradiation time becomes long successively from the first to final stages; setting a power average value of laser beam in a specific irradiation time of the plural-stage irradiation times so as to become larger than a power average value of another irradiation time longer than the specific irradiation time; and

forming recording marks being formed in the virtual recording cell and giving five stages or more different optical reflectance to the virtual recording cell when the laser beam is irradiated to the virtual recording cell [paragraph 15-25; para. 28-31 and para. 72-79 and figs. 1 and 3].

8. The aforementioned claim 11, recites the following steps, *inter alia*, disclosed in Arioka:

the plural irradiation times from the first stage to at least second stage, a power average value of laser beam of each stage is set so as to become longer than a power average value of another irradiation time longer than the plural irradiation times [paragraph 15-25; para. 28-31 and para. 72-79 and figs. 1 and 3].

9. The aforementioned claim 12, recites the following steps, *inter alia*, disclosed in Arioka:

at least first stage irradiation time, the power of laser beam is set larger than a reference power until the midway time point from the irradiation start time point, and is set to the reference power until the termination time from the midway time point, and in another irradiation time longer than the irradiation time, the power of laser beam is set to the reference power until the termination time from the irradiation start time point [paragraph 15-25; para. 28-31 and para. 72-79 and figs. 1 and 3].

10. A search based on the best understanding of the claims has been made to find the most pertinent art, but no statement about invention will be appropriate at this time regarding the allowability of claims 1-4 and 7 and no art rejection will be made in this office action regarding the claims 1-4 and 7, due to the speculation required to interpret

the claims because of their indefiniteness under 35 U.S.C. 112, 1st and 2nd paragraphs as noted above (see *In re Steele*, 134 USPQ 292).

Other prior art cited

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Arioka et al. (EPO Application 1 235 210 A1) "Optical recording medium, ..."
- b. Hayashi et al. (US. patent 6,370,097) "Information recording".

Contact Information

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is (703) 308-7940. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is (703) 872-9314.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To can be reached on (703) 305-4827.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-4700 or the group Customer Service section whose telephone number is (703) 306-0377.



Gautam R. Patel
Primary Examiner
Group Art Unit 2655

GAUTAM R. PATEL
PRIMARY EXAMINER

July 20, 2004